

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave. St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-012564**Date Inspected:** 27-Feb-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Du Zhi Qun**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Shailesh Gaikwad was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

**BAY 10:**

This QA Inspector performed Magnetic Particle Testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated a TL- 6028 (MT) report for this date. The member is identified as Tower Strut, after repair. The weld designations reviewed are as follows.

ED1-A6001-1-85

NDT Notification No-005236

This QA Inspector performed Magnetic Particle Testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated a TL- 6028 (MT) report for this date. The member is identified as Tower Strut. The weld designations reviewed are as follows.

ED1-A6001-2-10,37,28,16,24,52,64,51,76,8,85,73,61,82,58,50,14,34,26,40

NDT Notification No-005236

This QA Inspector performed Randomly Visual Testing (VT) of the area previously tested and accepted by ZPMC Quality Control personnel. The member is identified as Corner Splice Plate. The weld designations reviewed are

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## WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

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as follows.

ESD1-SPSA4-30-1A/B, 2A/B, ESD1-SPSA4-1-1A/B, 2A/B, WSD1-SPSA4-1-1A/B, 2A/B

NDT Notification No-005239

This QA Inspector observed the following work in progress:

BAY 11

Repair Welding

This QA Inspector observed ZPMC qualified welding personnel identified as 046704, 040733. Perform Shielded Metal Arc Welding (SMAW) on West tower lift 4, A/B corner joint, Joint identified WSTL4-2B/L-59A, ZPMC CWI Identified as Lilin. With Temporary welding repair report, WRR-T-WR3071, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-345-SMAW-2G(2F)Repair. For more information see below attached photo.

BAY10

This QA Inspector observed ZPMC qualified welding personnel identified as 050289. Perform Shielded Metal Arc Welding (SMAW) on South tower lift 5, D/E corner joint from Inside, Joint identified SSD1-TL5-1B-F-52A, ZPMC QC Identified as Du Zhi Qun. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-3211-Tc-U4b-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 052930. Perform Shielded Metal Arc Welding (SMAW) on South tower lift 5, C/D corner joint from Inside, Joint identified SSD1-TL5-1B-F-39B, ZPMC QC Identified as Du Zhi Qun. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-3212-Tc-U4b-1. For more information see below attached photo.

This QA Inspector observed during random Visual inspection, ZPMC Magnetic Particle Testing (MT) Inspector perform MT on Tower Strut. Item identified as ED1-A6001-4. For more information see below attached photo.

Repair Welding

This QA Inspector observed ZPMC qualified welding personnel identified as 050289. Perform Shielded Metal Arc Welding (SMAW) on Tower Strut. Joint identified ED1-STSA3-2-109M-2-24A/B, ZPMC QC identified as Yu Zhi Lai. With critical welding repair report, CWR-T-CWR577, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-345-SMAW-2G(2F)Repair. For more information see below attached photo.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.

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# WELDING INSPECTION REPORT

( Continued Page 3 of 3 )

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## Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

## Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Skyler Guest phone: 15000422360, who represents the Office of Structural Materials for your project.

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**Inspected By:** Gaikwad,Shailesh

Quality Assurance Inspector

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**Reviewed By:** Clifford,William

QA Reviewer